

ABSTRACT

A rate-adaptive mechanism for optimizing transmitter/receiver connections on a carrier-by-carrier basis for maximum data rate based on channel attributes for that connection and direction. Channel information is produced by a channel adaptation process based on channel characteristics and is stored in both transmitter and receiver as a channel map with an associated a channel map index for channel map look-up. The channel map index for a channel map used to modulate a payload of a frame is conveyed by transmitter to receiver in the frame so that the receiver is able to select the correct channel map for demodulation.

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